

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)**ScienceDirect**

Procedia - Social and Behavioral Sciences 195 (2015) 1081 – 1086

**Procedia**  
Social and Behavioral Sciences

World Conference on Technology, Innovation and Entrepreneurship

# Analysis of The World's Most Innovative Companies on The Basic Of Industry: 2005-2014

Aysel Ercis<sup>a</sup>, Musa Unalan<sup>b,\*</sup><sup>a</sup>*School of Social Sciences, Ataturk University, Erzurum, Turkey*<sup>b</sup>*School of Social Sceinces, Firat University, Elazığ, Turkey*

## Abstract

In most industries, almost everywhere in the world, growth is harder and harder for companies to generate. Therefore, searching for new sources of growth, companies across all industries and regions are increasing their spending on innovation every year. As a result, innovation continues to be a top corporate priority for the many companies. This paper to aims to emphasize importance of innovation for companies and to analyse the most innovative companies on basic of the industry between 2005 and 2014. The contribution of this paper consists in analysing the world's 50 most innovative companies by listed Boston Consulting group (BCG) in terms of range and industrial distribution. The other aim of this paper is to determine to which companies come from which countries and region in terms of companies listed. Our sample consists in 50 companies listed on BCG each year. The results reflect that companies specializing in digital technologies hold the top places or top ten in recent years. The other companies from different sectors compare in itself between 2005 and 2014.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of Istanbul Univeristy.

**Keywords:** Innovation, Innovative Companies, Industry, Digital Technologies

## 1. Introduction

In recent years, growth is harder and harder for companies in most sectors. Companies become to spend their money on innovation to find new ways for economic growth. Thus, innovation is getting to be special tool for the many companies. However, some of organizations' innovation skills are not enough. Because innovation is hard. Companies demonstrate their abilities to generate new products, markets and revenue streams. Executives may be

\* Corresponding author. Tel.: +090 553 605 60 46

E-mail address: [munalan@firat.edu.tr](mailto:munalan@firat.edu.tr)

underestimating the risks they face in the foreseeable future. They need to be prepare themselves for the future. Changing of business manner effects to all industry. For example, companies are proving slower to adopt digital. In digital world, big data and mobile are more important than in previous years. They have a significant impact on innovation in all industries. But many companies are not getting the message.

When studying innovative companies, the major issue that needs clarification is the relationship between innovation companies and their industry. Thus, innovation became important to this study. It is important to note that while this study draws heavily on the literature about how innovative companies be in the market, its primary research question is “how do we classify the most innovative companies in order to industrial distribution and country?”

## 2. Literature Review

### 2.1. Innovation

Innovation is a complicated process which carries intrinsic risks, but which shows considerable benefits if successful (Heskett, 1996). From the point of view of implementation, innovation is very important. When Peter Drucker (1985) analyze the practice of innovation, he made clear something about innovation.

“Before 1880 or so, invention was mysterious; early nineteenth-century books talk incessantly of the flash genius. The inventor himself was a half-romantic, half-ridiculous figure, tinkering away of in lonely garret. By 1914, the time World War I broke out, “invention” became “research”, a systematic, purposeful activity, which is planned and organized with high predictability both of the results aimed at and likely to be achieved. Something similar now has to be done with respect to innovation. (Drucker, 1985:34) “

The progress of technology define technology innovation as the generation of significant change (Freeman, 1982). Understanding and managing new technologies, products and services, and new procedures, policies and organizational forms in relation to socio-economical contexts are important for successful and purposeful innovation (Van de Ven, Polley & Garup, 1999:9). According to Booz, Allen and Hamilton (1982) there are four innovation drivers as identified by senior executives: technology advances, changing customer needs, shortening product life cycles and increased word competition (Cooper, 1993).

There are five basic disciplines that organizations need to master in order to be successful at innovation. First, is working on important customers and market needs. The second discipline is value creation. The third disciplines involves developing innovation champions. Fourth, organizations need to build innovation teams. Finally, there needs to be organizational alignment (Carlson & Wilmot, 2006). Carlson and Wilmot (2006) suggested that the most innovative companies have mastered the ability to continuously create value.

Carlson and Wilmot (2006) argue that an innovation needs a champion to push it forward (p 157). They observed:

“Champions are builders who are passionate and committed. They stay focused on a vision and inspire their team and partners to work together. They persevere by taking full responsibility. When road bumps occur...they come back at the problem in new ways. (p.161)”

### 2.2. Innovation company

Innovative firms experience greater profit margins and larger market shares in consequence of increased customer loyalty and limited competitive entry into markets (Marvel and Lumpkin 2007). Innovative firms typically invest more in research and development than less innovative firms (Sher and Yang 2005; Veryzer 2005). Innovative firms also invest a great deal in prototyping, which generates large amounts of waste until production processes are honed for the final product (Wheelwright and Clark 1992). In order to successfully innovate, firms need to understand which resource investments are likely to return value for innovation (Olson, Walker, and Ruekert 1995).

Florida and Goodnight (2005) reported “creative people work for the love of a challenge. They crave the feeling for accomplishment that comes from cracking a riddle, be it technological, artistic, social, or logistical. They want to good work” (p.126). The reason of why people want to good work is feeling good (Gardner, Csikszentmihalyi, & Damon, 2001, p.5). Damanpour (1996) described that the adoption of innovation is a series of actions that includes the generation, development, and implementation of new ideas or behaviors. Organizational innovation is the successful implementation of creative ideas within an organization (Amabile, 1988, p.126).

### 3. Methodology

#### 3.1. Research Goal

In this survey we aim to identify the importance of innovation for companies and to analyze the most innovative companies on basic of the industry and country between 2005 and 2014.

#### 3.2. Sample and Data Collection

In determining the sample analysis, we started from the companies published on Boston Consulting Group (BSG). Boston Consulting Group published *The Most Innovative 10 Companies* of 2005, 2006 and 2007. After that, it published *The Most Innovative 50 Companies* of 2008, 2009, 2010, 2012, 2013 and 2014. (Note that BCG did not publish a survey in 2011.) Thus, according to above mentioned years, 10 and 50 companies which are listed on BCG at some industries identified in our sample.

Further we will proceed to classify the companies sample by eight main industries such as:

1. Consumer goods and retail
2. Technology and telecom
3. Automotive
4. Industrial products and processes
5. Energy and environment
6. Financial services
7. Media and entertainment
8. Healthcare

#### 3.3. Analyses and Results

The graph below reflects the distribution of the 10 most innovative companies between 2005 and 2014, by sector of companies:

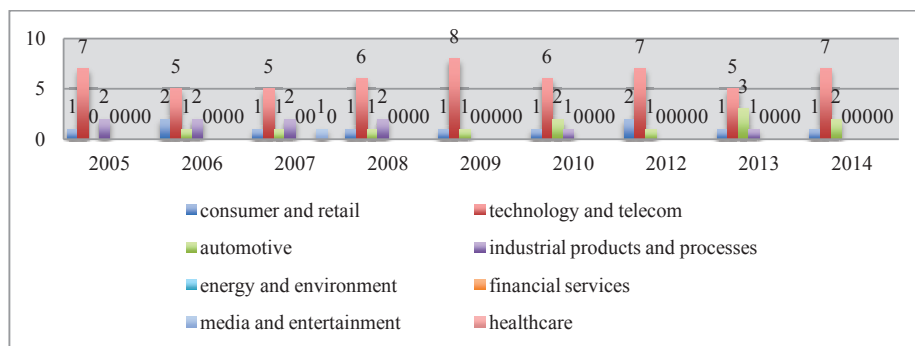


Fig. 1. Industrial distribution of the 10 most innovative companies: 2005-2014

When analyzed the figure 1, we note that 4 industries which are consumer and retail, technology and telecom, automotive, and industrial products and processes are predominant in order to sharing the 10 most innovative companies. From the above chart it is found out that a total of 5 (2006, 2007, 2013), 6 (2008, 2010), 7 (2005), and 8 (2009) listed companies in total of 10 companies representing a majority share in all sample companies (from 50% to 80%) belong to companies from the technology and telecom industry. Second place is occupied by the industrial products and processes, being in numbers of 2 (2005, 2006, 2007, 2008) which representing 20% in total, by the automotive industry, being in numbers of 2 (2010, 2014), and 3 (2013) which representing 20% and %30 in total, by the consumer and retail, being in numbers of 2 (2006, 2012) which representing 20% in total. Third place is occupied by the consumer and retail, being in number of 1 (2005, 2007, 2008, 2009, 2010, 2013, 2014) which representing 10% in total, by the automotive, being in number of 1 (2006, 2007, 2008, 2009, 2012) which representing 10% in total, by the media and entertainment, being in number of 1 (2007) which representing 10% in total. Shares of 0% belong to companies from any other sectors such as: energy and environment, financial services, media and entertainment, and healthcare.

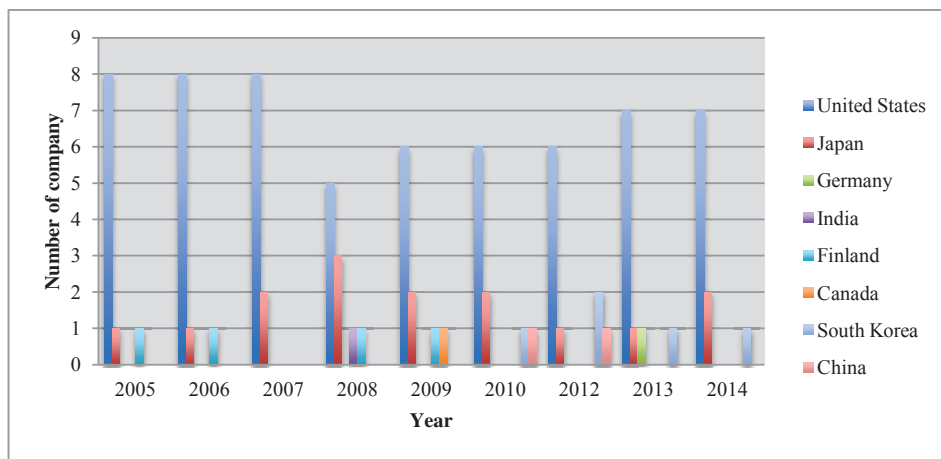


Fig. 2. Distribution of the 10 most innovative companies by country: 2005-2014

The principle of proportionality was set to each country: United States obtained a 80.00 representation in 2005, 2006, 2007 being in numbers of 8, a 50.00 representation in 2006 being in numbers of 5, a 60.00 representation in 2009, 2010, 2012 being in numbers of 6, and a 70.00 representation in 2013, 2014 being in numbers of 7, followed by the Japan with 30.00 in 2008, 20.00 in 2007, 2009, 2010, 2014, of South Korea with 20.00 and, finally, of Japan (2005, 2006, 2012, 2013), Finland (2005, 2006, 2008, 2009), South Korea (2010, 2013, 2014), India (2008), Canada (2009), China (2010, 2012), Germany (2013) with the remaining 10.00.

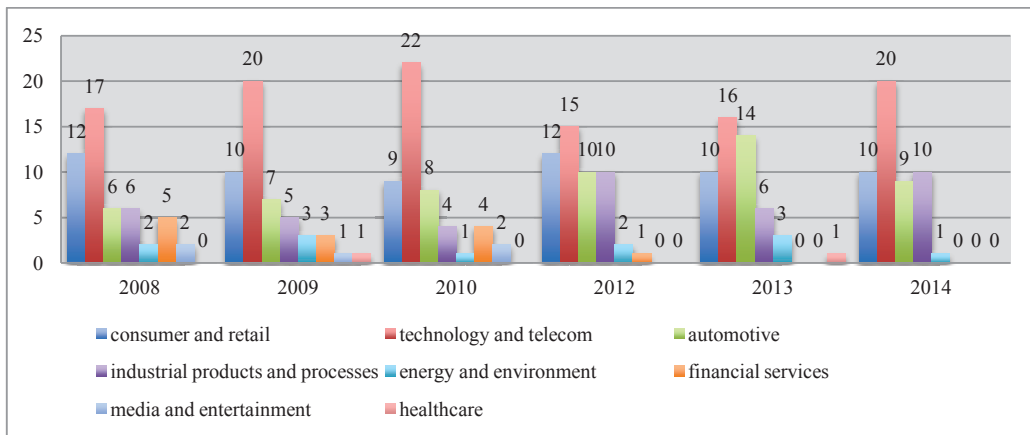


Fig. 3. Industrial distribution of the 50 most innovative companies: 2008-2014

From the above chart it is found out that a total of 15 (2012), 16 (2013), 17 (2008), 20 (2009, 2014), 22 (2010) listed companies in total of 50 companies representing a majority share in all sample companies (from 30% to 44%) belong to companies from the technology and telecom industry. Second place is occupied by the industrial products and processes, being in numbers of 10 (2014) which representing 20% in total, by the automotive industry, being in numbers of 14 (2013) which representing 28% in total, by the consumer and retail, being in numbers of 9 (2010), 10 (2009, 2014), and 12 (2008, 2012) which representing from 18% to 24% in total. Third place is occupied by the consumer and retail, being in numbers of 10 (2013) which representing 20% in total, by the automotive, being in numbers of 6 (2008), 7 (2009), 8 (2010), 9 (2014), and 10 (2012) which representing from 12% to 20% in total, by the industrial products and processes, being in numbers of 10 (2012) which representing 20% in total. Reduced shares of 0% to 10 belong to companies from any other sectors such as: energy and environment, financial services, media and entertainment, and healthcare.

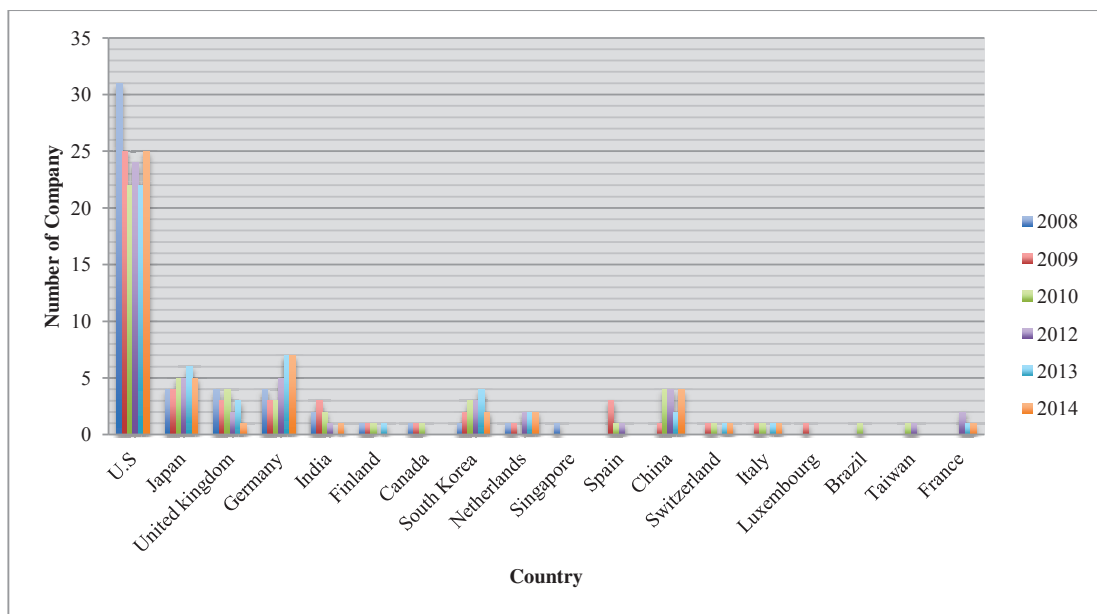


Fig. 4. Distribution of the 50 most innovative companies by country: 2005-2014

According to figure 4, United States has the most innovative companies between 2008 and 2014 with being numbers of 31 firms (2008), 25 (2009), 22 (2010), 24 (2012), 22 (2012), 25 (2015). In recent years, Germany and China has increased the number of firms in most innovated listed.

#### 4. Conclusion

The reasons of changing the structure of business, most of companies have problems. Innovation is important from products to customer expectations. Customers want to such products that make their life easier. And also, increasing the number of competitors led to companies for finding new ways to survive. Thus, firms should be innovative.

Our research consists in analyzing the world's 50 most innovative companies by listed Boston Consulting group (BCG) in terms of range and industrial distribution. The purpose of this research is to determine to which companies come from which countries and region in terms of companies listed. When we analyze *the 10 and 50 most innovative companies* by industrial, we saw that technology and telecom industry is dominant in total. Companies which are specialize in digital technologies dominate the list of most innovative companies. Following technology and telecom, industries which are consumer and retail, and automotive, industrial products and processes has a considerable amount of firms in these two lists. By territorial, United States has the most companies in *the 10 and 50 most innovative companies* listed. Also, Japan, United Kingdom, South Korea, Germany, and China have most innovative companies comparing to the other countries.

#### References

- Amabile, T.M. (1988). A model of creativity and innovation in organizations. In B.M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 10, pp. 123-167). Greenwich, CT: JAI.
- Carlson, C.R., & Wilmot, W.W. (2006). *Innovation: The five disciplines for creating what customers want* (1<sup>st</sup> ed.). New York: Crown Business.
- Cooper, R.G. (1993). *Winning at New Products: Accelerating the Process from Idea to Launch*, Second ed., Addison Wesley, Reading, Massachusetts, pp. 6-7.
- Damanpour, F. (1996). Organizational complexity and innovation: Developing and testing multiple contingency models. *Management Science*, 42 (5), 693.
- Drucker, P.F. (1985). *Innovation and Entrepreneurship: Practice and Principles*, Harpers & Row, New York, US.
- Florida, R., & Goodnight, J. (2005). Managing for Creativity. *Harvard Business Review*, 83(7), 124.
- Freeman, C. (1982). *The Economics of Industrial Innovations*, Frances Printer, UK.
- Gardner, H., Csikszentmihalyi, M., & Damon, W. (2001). *Good work: When excellence and ethics meet*. New York: Basic Books.
- Heskett, J. (1996). *Technological Development and Design Innovation*, Class Notes, Institute of Design, Illinois Institute of Technology, Chicago, US, Spring.
- Marvel, Matthew R. and G. T. Lumpkin (2007), "Technology Entrepreneurs' Human Capital and Its Effects on Innovation Radicalness," *Entrepreneurship Theory and Practice*, 31 (6), 807-828.
- Olson, Eric M., Orville C. Walker, Jr., and Robert W. Ruekert (1995), "Organizing for effective new product development: The moderating role of product innovativeness," *Journal of Marketing*, 59 (1), 48-62.
- Sher, Peter J. and Phil Y. Yang (2005), "The effects of innovative capabilities and R&D clustering on firm performance: the evidence of Taiwan's semiconductor industry," *Technovation*, 25, 33-43.
- Van de Ven, A.H., Polley, E.P., Garud, R., and Venkataraman, S. (1999). *The Innovation Journey*, Oxford University Press, Oxford, US.
- Veryzer, Robert W. (2005), "The Roles of Marketing and Industrial Design in Discontinuous New Product Development," *Journal of Product and Innovation Management*, 22, 22-41.
- Wheelwright, Steven C. and Kim B. Clark (1992), "Competing Through Development Capability in Manufacturing-Based Organizations," *Business Horizons*, 35 (4), 29-43